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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,127	08/03/2001	Maximilian Ott	111785-122	7855

7590

08/25/2005

Victor F. Souto, Esq.  
Hale and Dorr LLP  
650 College Road East  
Princeton, NJ 08540

EXAMINER
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JAROENCHONWANIT, BUNJOB

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/922,127

Applicant(s)

OTT ET AL.

Examiner

Bunjoo Jaroenchonwanit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12-23, 27-35, 39-45 and 47-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 55 is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-17, 22, 23, 39-45 and 47-54 is/are rejected.
- 7) ☒ Claim(s) 18-21 and 27-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/5/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This office action is in response to amendment f05/05/2005, the amendment has been considered. Claims 11, 24-26, 36-38 & 48 were cancelled; claims 49-55 were added; Claims 1-10, 12-23, 27-35, 39-45 and 47-55 are pending for examination, newly rejection are as stated below.
2. The text of those sections of Title 35, U.S. Code § 103 (a) not included in this action can be found in a prior Office Action.
3. Claims 1-17, 22-23, 39-45 & 49-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harari et al (US 2002/0004844, "Harari," hereafter) and Balog et al (US 2002/0022453, "Balog," hereafter) and further in view of Wall (US 2002/091736).
4. As per claims 1, 12, 39, 45, 47 and 49-54, Harari disclosed an apparatus for routing content through a network based on semantics of the content being routed comprising: a computer comprising; at least one network interface card (§38); a signaling agent; a forwarding agent (§16). However Harari did not explicitly disclose in detail a load manager; and a semantic profile manager. Balog disclosed a load manager; and a semantic profile manager (§29). However Harari-Balog failed to disclose the same type of semantics is to identify overlap area of content, i.e., using semantic profile to allocate content of interest. However, In the same field of endeavor, Wall teaches the same (see § 64, 111, 112, 120, 123-126, 168-169, 327, 333-337, 341-348, 351-360, 365, 387, 390404-406and 415-417). It would have been obvious to one in the ordinary in the skill in art to incorporate load manager and semantic profile manager functionalities as taught by Balog and Wall with an apparatus for routing content through

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network as taught by Harari in order to transfer the content to its destination in an efficient manner.

5. As per claims 2, 4, 5, 42, 44 & 48, Harari-Balog-Wall disclosed a semantic router comprising: a profile manager that aggregates semantic profiles (Balog ¶ 32-33); and a forwarding agent that forwards semantic packets to neighboring semantic router based on the aggregated semantic (Balog ¶ 6 & 29).

6. As per claim 3 Harari-Balog-Wall disclosed the apparatus as in claim 2 wherein the semantic profiles are aggregated ontological trees that are used to form routing tables (Balog, ¶ 29).

7. As per claim 6 Harari-Balog-Wall disclosed the apparatus as in claim 1 wherein the profile manager, the load manager and the signaling agent interact to balance processing load of the routing apparatus (Balog, ¶ 29).

8. As per claim 7 Harari-Balog-Wall disclosed the apparatus as in claim 1 wherein the load manager manages processing load partly by delegating the processing load of the routing apparatus to neighboring routing apparatus (Balog, ¶ 29 & 31).

9. As per claim 8, Harari-Balog-Wall disclosed the apparatus as in claim 1 wherein the load manager interacts with other routing apparatus and a semantic log keeper to become aware of current topology of the network (Balog, ¶ 34 & 35).

10. As per claims 9 & 40, Harari-Balog disclosed the apparatus as in claim 1 wherein the forwarding agent is composed of a routing cache and routing data (Balog, ¶ 36, L.1-8, 14-18).

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11. As per claims 10, 15, 16 & 41, Harari-Balog-Wall disclosed the apparatus as in claim 9 wherein the forwarding agent routes incoming semantic packets to their destination by using information included in the routing cache (Balog, ¶ 36).

12. As per claim 13, Harari-Balog-Wall disclosed the apparatus as in claim 10 wherein the forwarding agent analyzes the semantic description of the semantic packet to determine the destination of the semantic packet (Harari-Balog-Wall, ¶ 35 & 36).

13. As per claim 14, Harari-Balog-Wall disclosed the method as in claim 12 further comprising filtering the routed semantic packet before reaching a content consumer (Harari-Balog-Wall, ¶ 38).

14. As per claim 17 Harari-Balog-Wall disclosed the method as in claim 15 wherein the header is in XML markup language (Balog, ¶ 20, 23 & 31).

15. As per claim 22 Harari-Balog-Wall disclosed the method as in claim 12 wherein said method is deployed as an overlay network on top of conventional network routers (Balog, ¶ 36).

16. As per claim 23 Harari-Balog-Wall disclosed the method as in claim 22 further comprising sending semantic packets through the network routers by tunneling (Balog, ¶ 36).

17. As per claim 43 Harari-Balog-Wall disclosed multi protocol router comprising: a routing engine; a network routing engine; and a semantic packet routing engine (Balog ¶ 6 & 33).

18. Claims 18-21, 27-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. Claim 55 is allowed.

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20. Applicant's arguments filed 5/5/2005 have been considered but are moot in view of the new ground(s) of rejection.

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

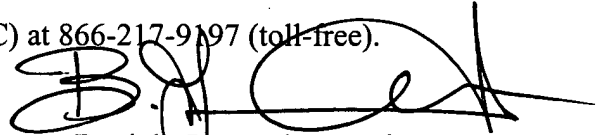
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bunjob Jaroenchonwanit whose telephone number is (571) 272-3913. The examiner can normally be reached on 8:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bunjob Jaroenchonwanit  
Primary Examiner  
Art Unit 2143

/bj  
8/19/05